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IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANTS: James M. Gee and Russell Schmit  
SERIAL NO.: Unknown GROUP NO.  
FILED: EXAMINER:  
FOR: Fabrication of Back-Contacted Silicon Solar Cells Using Thermomigration to  
Create Conductive Vias

Assistant Commissioner for Patents  
Washington, D.C. 20231

June 26, 2003

INFORMATION DISCLOSURE STATEMENT

The following sections are being submitted for this Information Disclosure Statement:

1. Preliminary Statements

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

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2. Form PTO - 1449 (Modified).

3. The person making this statement is the attorney or agent who signs below on the basis of the information supplied by the inventor(s) and the information in the attorney's or agent's file.

Dated: 6/28/03

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U. S. Postal Service on the date shown below as Express Mail No. V332389041US in an envelope addressed to the: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Dated: 6/26/03

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Form PTO-1449 (SNL-Modified) (2-91)  
List of Patents and Publications  
for Applicant's  
Information Disclosure Statement  
(use several sheets if necessary)

Atty Docket No: SD-7215/S-99,840  
Serial Number:  
APPLICANT: James M. Gee & Russell R. Schmit  
GROUP: FILING DATE: 6/26/03

### REFERENCE DESIGNATION

| Ex'r<br>Init | Document No. | Date     | U.S. Patent Documents<br>Name | Sub<br>Class | Class | File Date |
|--------------|--------------|----------|-------------------------------|--------------|-------|-----------|
| AA           | 3,936,319    | 2/3/76   | Solar Cell                    | 136/89       |       | 2/3/76    |
| AB           | 4,173,496    | 11/6/79  | Inegrated Solar Cell Array    | 136/89       |       | 5/30/78   |
| AC           | 4,184,897    | 1/22/80  | Droplet Migration Doping,,,   | 148/1.5      |       | 9/21/78   |
| AD           | 4,190,852    | 2/26/80  | Cryptographic Key...          | 357/30       |       | 9/14/78   |
| AE           | 4,377,423    | 3/22/83  | Liquid Metal Inclusion...     | 148/171      |       | 4/28/82   |
| AF           | 5,468,652    | 11/21/95 | Method of Making...           | 437/2        |       | 11/21/95  |

| Document No. | Date | Foreign Patent Documents<br>Name | Sub<br>Class | Class | Translation<br>Yes | No |
|--------------|------|----------------------------------|--------------|-------|--------------------|----|
|--------------|------|----------------------------------|--------------|-------|--------------------|----|

### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- BA |Eikelboom, et al, "Conductive Adhesives for Interconnection of Busbarless Emitter Wrap-Through Solar Cells on A structured Metal Foil", 17<sup>th</sup> Dur. PV Solar Energy Conf., Munich, Germany, Oct. 2001.
- BB |Van Kerschaver, et al, "High Performance Modules Based on Back Contacted Solar Cells", 17<sup>th</sup> Dur. PV Solar Energy Conf., Munich, Germany, Oct 2001.
- BC |Kray, et al, "High-Efficiency Emitter-Wrap-Through Cells", 17<sup>th</sup> EU-PVSEC Munich (2001), October 2001.
- BD |Knauss, et al, "Emitter WrapThrough Solar Cells using Electronics Plating Metallisation", 17<sup>th</sup> Dur. PV Solar Energy Conf., Munich, Germany, October 2001
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- BF |Dokhac, et al, "Al Thermomigration Applied to the Formation of Deep Junctions for Power Device Insulation", Microelectronics Reliability (1999) 23-27.,
- BG |Cline, et al, "High-Speed Droplet Migration in Silicon", General Electric Research and Development Center, Schenectady, New York 12301, Rec'd 8/75 ; in final form 2/6/76.
- BH |Anthony, et al, "Random Walk of Liquid Droplets Migration in Silicon", General Electric Corporate Research and Development Center, Schenectady, New York 12308, (Rec'd 8/27/75; in final form 2/6/76.
- BI |Cline, et al, "Thermomigration of Aluminum-Rich Liquid Wires Through Silicon, General Electric Corporate Research and Development Center, Schenectady, New York 12301, Rec'd 8 23, 75.

Examiner:

Date Considered: